

AUG 28 2006

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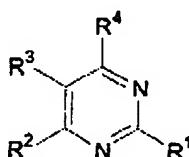
Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the present application.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1. (currently amended) A compound of structural formula I:



(I)

or a pharmaceutically acceptable salt thereof, wherein:

R¹ is selected from:

— (1) — C₁₋₁₀alkyl,

— (2) — OR^a,

— (3) — NR^aR^b,

— (4) — NR^bC(O)R^a,

— (5) — CO₂R^a,

— (6) — C(O)NR^aR^b,

— (7) — cyano, and

— (8) — SO₂R^b,

(1) C₁₋₆alkyl,

(2) -OH,

(3) -OC₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents,

(4) cycloalkyloxy-, unsubstituted or substituted with one to three R^c substituents,

(5) cycloalkyl-C₁₋₄alkyloxy-, unsubstituted or substituted with one to three R^c substituents,

(6) cycloheteroalkyloxy-, unsubstituted or substituted with one to three R^c substituents,

(7) cycloheteroalkyl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^c substituents,

(8) phenyloxy, unsubstituted or substituted with one to three R^c substituents,

(9) heteroaryloxy, unsubstituted or substituted with one to three R^c substituents,

(10) phenyl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^c substituents,

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- (11) heteroaryl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^C substituents,
- (12) -NR^aR^b
- (13) -NR^bC(O)R^a
- (14) -CO₂H
- (15) C₁₋₆alkyloxycarbonyl-, unsubstituted or substituted with one to three R^C substituents,
- (16) cycloalkyloxycarbonyl-, unsubstituted or substituted with one to three R^C substituents,
- (17) cycloalkyl-C₁₋₄alkyloxycarbonyl-, unsubstituted or substituted with one to three R^C substituents,
- (18) phenyloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
- (19) heteroaryloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
- (20) phenyl-C₁₋₄alkyloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
- (21) heteroaryl-C₁₋₄alkyloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
- (22) -C(O)NR^aR^b
- (23) cyano,
- (24) -SO₂C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents; and

provided that R¹ is not -NH₂;

R² is selected from:

- (1) hydrogen,
- (2) C₁₋₁₀alkyl,
- (3) -OR^a,
- (4) -NR^aR^b,
- (5) -NR^aC(O)R^b,
- (6) -CO₂R^a,
- (7) -C(O)NR^aR^b,
- (8) cyano,
- (9) -SR^a, and
- (10) -SO₂R^a;

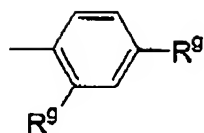
wherein R³ and R⁴ are each independently selected from:

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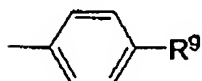
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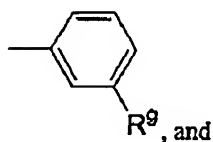
(1)



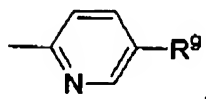
(2)



(3)



(4)

each R^a is independently selected from:

- (1) hydrogen,
- (2) C_{1-10} alkyl,
- (3) C_{2-10} alkenyl,
- (4) cycloalkyl,
- (5) cycloalkyl- C_{1-10} alkyl;
- (6) cycloheteroalkyl,
- (7) cycloheteroalkyl- C_{1-10} alkyl;
- (8) aryl,
- (9) heteroaryl,
- (10) aryl- C_{1-10} alkyl, and
- (11) heteroaryl- C_{1-10} alkyl; and

each R^b is independently selected from:

- (1) hydrogen,
- (2) C_{1-10} alkyl,
- (3) C_{2-10} alkenyl,
- (4) cycloalkyl,
- (5) cycloalkyl- C_{1-10} alkyl;
- (6) cycloheteroalkyl,
- (7) cycloheteroalkyl- C_{1-10} alkyl;
- (8) aryl,

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- (9) heteroaryl,
- (10) aryl-C₁₋₁₀alkyl, and
- (11) heteroaryl-C₁₋₁₀alkyl, or

R^a and R^b together with the nitrogen atom to which they are attached form a bridged or unbridged heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-R^d,

each R^a and R^b may be unsubstituted or substituted with one to three substituents selected from R^c; each R^c is independently selected from:

- (1) C₁₋₁₀alkyl,
- (2) -OR^d,
- (3) -NR^eS(O)_mR^d,
- (4) halogen,
- (5) -SR^d,
- (6) -S(O)_mNR^dRe,
- (7) -NR^dRe,
- (8) -C(O)R^d,
- (9) -CO₂R^d,
- (10) -CN,
- (11) -C(O)NR^dRe,
- (12) -NR^eC(O)R^d,
- (13) -NR^eC(O)OR^de,
- (14) -NR^eC(O)NR^dRe,
- (15) -CF₃,
- (16) -OCF₃,
- (17) cycloheteroalkyl,
- (18) aryl,
- (19) arylC₁₋₄alkyl,
- (20) heteroaryl, and
- (21) heteroarylC₁₋₄alkyl;

R^d and R^e are independently selected from:

- (1) hydrogen,
- (2) C₁₋₁₀alkyl,
- (3) C₂₋₁₀ alkenyl,
- (4) cycloalkyl,
- (5) cycloalkyl-C₁₋₁₀alkyl;
- (6) cycloheteroalkyl,

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- (7) cycloheteroalkyl-C₁₋₁₀ alkyl;
- (8) aryl,
- (9) heteroaryl,
- (10) aryl-C₁₋₁₀alkyl, and
- (11) heteroaryl-C₁₋₁₀alkyl, or

R^d and R^e together with the nitrogen atom to which they are attached form a bridged or unbridged heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-R^f,

each R^d and R^e may be unsubstituted or substituted with one to three substituents selected from R^f;
 R^f is independently selected from:

- (1) halogen,
- (2) C₁₋₁₀alkyl,
- (3) -O-C₁₋₄alkyl,
- (4) -S-C₁₋₄alkyl,
- (5) -CN,
- (6) -CF₃, and
- (7) -OCF₃;

each R^g is independently selected from:

- (1) halogen,
- (2) C₁₋₁₀alkyl,
- (3) -O-C₁₋₄alkyl,
- (4) -S-C₁₋₄alkyl,
- (5) -CN,
- (6) -CF₃, and
- (7) -OCF₃; and

m is selected from 1 and 2.

Claim 2. (canceled)

Claim 3. (canceled)

Claim 4. (currently amended) The compound according to Claim 1, wherein:

~~R⁺ is selected from:~~

- ~~(1) C₁₋₆alkyl,~~
- ~~(2) OH,~~
- ~~(3) OC₁₋₆alkyl, unsubstituted or substituted with one to three R^e substituents,~~

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- ~~(4) cycloalkyloxy, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(5) cycloalkyl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(6) cycloheteroalkyloxy, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(7) cycloheteroalkyl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(8) phenyloxy, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(9) heteroaryloxy, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(10) phenyl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(11) heteroaryl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(12) NR^aR^b,~~
- ~~(13) NR^bC(O)R^a,~~
- ~~(14) CO₂H,~~
- ~~(15) C₁₋₆alkyloxycarbonyl, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(16) cycloalkyloxycarbonyl, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(17) cycloalkyl-C₁₋₄alkyloxycarbonyl, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(18) phenyloxycarbonyl, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(19) heteroaryloxycarbonyl, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(20) phenyl-C₁₋₄alkyloxycarbonyl, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(21) heteroaryl-C₁₋₄alkyloxycarbonyl, unsubstituted or substituted with one to three R^e substituents,~~
- ~~(22) C(O)NR^aR^b,~~
- ~~(23) cyano,~~
- ~~(24) SO₂C₁₋₆alkyl, unsubstituted or substituted with one to three R^e substituents; and~~

R^a and R^b are each selected from:

- (1) hydrogen,
- (2) C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents,
- (3) cycloalkyl, unsubstituted or substituted with one to three R^c substituents,
- (4) cycloalkyl-C₁₋₄alkyl, unsubstituted or substituted with one to three R^c substituents,
- (5) phenyl, unsubstituted or substituted with one to three R^c substituents,
- (6) heteroaryl, unsubstituted or substituted with one to three R^c substituents,
- (7) phenyl-C₁₋₄alkyl, unsubstituted or substituted with one to three R^c substituents, or

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(8) heteroaryl-C₁₋₄alkyl, unsubstituted or substituted with one to three R^C substituents, or when bonded to nitrogen, R^a and R^b together with the nitrogen atom to which they are attached form a bridged or unbridged heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-R^d, unsubstituted or substituted on carbon with one to three R^C substituents;
 or a pharmaceutically acceptable salts thereof.

Claim 5. (currently amended) The compound according to Claim 4, wherein R¹ is selected from:

- (1) C₁₋₆alkyl,
- (2) —OH,
- (3) (2) -OC₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- (4) (3) C₄₋₇cycloalkyloxy-, unsubstituted or substituted with one to two R^C substituents,
- (5) (4) cycloalkyl-C₁₋₃alkyloxy-, unsubstituted or substituted with one to two R^C substituents,
- (6) (5) phenyloxy, unsubstituted or substituted with one to two R^C substituents,
- (7) (6) pyridyloxy, unsubstituted or substituted with one to two R^C substituents,
- (8) (7) phenyl-C₁₋₃alkyloxy, unsubstituted or substituted with one to two R^C substituents,
- (9) (8) pyridyl-C₁₋₃alkyloxy, unsubstituted or substituted with one to two R^C substituents,
- (10) (9) -NR^aR^b, wherein:

R^a is selected from:

- (a) C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- (b) cycloalkyl, unsubstituted or substituted with one to two R^C substituents,
- (c) cycloalkyl-C₁₋₄alkyl, unsubstituted or substituted with one to two R^C substituents,
- (d) phenyl, unsubstituted or substituted with one to two R^C substituents,
- (e) heteroaryl, unsubstituted or substituted with one to two R^C substituents,
- (f) benzyl, unsubstituted or substituted with one to two R^C substituents,

R^b is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents, or R^a and R^b together with the nitrogen atom to which they are attached form a bridged or unbridged heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-R^d, unsubstituted or substituted on carbon with one to two R^C substituents,

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~~(11)~~ (10) -NR^bC(O)R^a, wherein:

R^a is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents,
- (c) cycloalkyl, unsubstituted or substituted with one to two R^c substituents,
- (d) cycloalkyl-C₁₋₄alkyl, unsubstituted or substituted with one to two R^c substituents,
- (e) phenyl, unsubstituted or substituted with one to two R^c substituents,
- (f) pyridyl, unsubstituted or substituted with one to three R^c substituents,
- (g) benzyl, unsubstituted or substituted with one to two R^c substituents,
- (h) pyridylmethyl-, unsubstituted or substituted with one to three R^c substituents,

R^b is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents,
- ~~(12)~~ (11) -CO₂H,
- ~~(13)~~ (12) C₁₋₆alkyloxycarbonyl-, unsubstituted or substituted with one to three R^c substituents,

~~(14)~~ (13) -C(O)NR^aR^b, wherein:

R^a is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents,

R^b is selected from:

- (a) hydrogen, and
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents,
- ~~(15)~~ (14) cyano
- ~~(16)~~ (15) -SC₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents, and
- ~~(17)~~ (16) -SO₂C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents;

each R^c is independently selected from:

- (1) C₁₋₃alkyl,
- (2) hydroxy,
- (3) -OC₁₋₃alkyl,
- (4) halogen,
- (5) -SCH₃,
- (6) -SH,
- (7) -NR^dR^e,
- (8) -C(O)C₁₋₃alkyl,

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- (9) $-\text{CO}_2\text{C}_{1-3}\text{alkyl}$,
- (10) $-\text{CO}_2\text{H}$,
- (11) $-\text{CN}$,
- (12) $-\text{CF}_3$,
- (13) $-\text{OCF}_3$,
- (14) cycloheteroalkyl,
- (15) phenyl,
- (16) benzyl, and
- (17) pyridyl;

or a pharmaceutically acceptable salts thereof.

Claim 6. (previously presented) The compound according to Claim 4, wherein R^2 is selected from:

- (1) hydrogen,
- (2) $\text{C}_{1-6}\text{alkyl}$,
- (3) $-\text{OH}$,
- (4) $-\text{OC}_{1-6}\text{alkyl}$, unsubstituted or substituted with one to three R^c substituents,
- (5) cycloalkyloxy-, unsubstituted or substituted with one to three R^c substituents,
- (6) cycloalkyl- $\text{C}_{1-4}\text{alkyloxy}$ -, unsubstituted or substituted with one to three R^c substituents,
- (7) cycloheteroalkyloxy-, unsubstituted or substituted with one to three R^c substituents,
- (8) cycloheteroalkyl- $\text{C}_{1-4}\text{alkyloxy}$ -, unsubstituted or substituted with one to three R^c substituents,
- (9) phenyloxy, unsubstituted or substituted with one to three R^c substituents,
- (10) heteroaryloxy, unsubstituted or substituted with one to three R^c substituents,
- (11) phenyl- $\text{C}_{1-4}\text{alkyloxy}$ -, unsubstituted or substituted with one to three R^c substituents,
- (12) heteroaryl- $\text{C}_{1-4}\text{alkyloxy}$ -, unsubstituted or substituted with one to three R^c substituents,
- (13) $-\text{NR}^a\text{R}^b$,
- (14) $-\text{NR}^b\text{C}(\text{O})\text{R}^a$,
- (15) $-\text{CO}_2\text{H}$,
- (16) $\text{C}_{1-6}\text{alkyloxycarbonyl}$ -, unsubstituted or substituted with one to three R^c substituents,
- (17) cycloalkyloxycarbonyl-, unsubstituted or substituted with one to three R^c substituents,
- (18) cycloalkyl- $\text{C}_{1-4}\text{alkyloxycarbonyl}$ -, unsubstituted or substituted with one to three R^c substituents,

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- (19) phenyloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
 - (20) heteroaryloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
 - (21) phenyl-C₁₋₆alkyloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
 - (22) heteroaryl-C₁₋₆alkyloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
 - (23) -C(O)NR^aR^b,
 - (24) cyano,
 - (25) -SC₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents, and
 - (26) -SO₂C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- or a pharmaceutically acceptable salts thereof.

Claim 7. (previously presented) The compound according to Claim 1, wherein:

R² is selected from:

- (1) hydrogen,
- (2) C₁₋₆alkyl,
- (3) -OH,
- (4) -OC₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- (5) C₄₋₇cycloalkyloxy-, unsubstituted or substituted with one to two R^C substituents,
- (6) C₄₋₇cycloalkyl-C₁₋₃alkyloxy-, unsubstituted or substituted with one to two R^C substituents,
- (7) phenoxy, unsubstituted or substituted with one to two R^C substituents,
- (8) pyridyloxy, unsubstituted or substituted with one to two R^C substituents,
- (9) phenyl-C₁₋₃alkyloxy, unsubstituted or substituted with one to two R^C substituents,
- (10) pyridyl-C₁₋₃alkyloxy, unsubstituted or substituted with one to two R^C substituents,
- (11) -NR^aR^b, wherein:

R^a is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- (c) cycloalkyl, unsubstituted or substituted with one to two R^C substituents,
- (d) cycloalkyl-C₁₋₄alkyl, unsubstituted or substituted with one to two R^C substituents,
- (e) phenyl, unsubstituted or substituted with one to two R^C substituents,
- (f) heteroaryl, unsubstituted or substituted with one to two R^C substituents,
- (g) benzyl, unsubstituted or substituted with one to two R^C substituents,

R^b is selected from:

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- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents, or R^a and R^b together with the nitrogen atom to which they are attached form a bridged or unbridged heterocyclic ring of 4 to 7 members, unsubstituted or substituted on carbon with one to two R^C substituents,

(12) -NHC(O)R^a, wherein:

R^a is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- (c) cycloalkyl, unsubstituted or substituted with one to two R^C substituents,
- (d) cycloalkyl-C₁₋₄alkyl, unsubstituted or substituted with one to two R^C substituents,
- (e) phenyl, unsubstituted or substituted with one to two R^C substituents,
- (f) pyridyl, unsubstituted or substituted with one to three R^C substituents,
- (g) benzyl, unsubstituted or substituted with one to two R^C substituents,
- (h) pyridylmethyl-, unsubstituted or substituted with one to three R^C substituents,

(13) cyano, and

(14) -SO₂C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents;

or a pharmaceutically acceptable salts thereof.

Claim 8. (currently amended) The compound according to Claim 1, wherein:

R^I is selected from:

(1) methyl, ethyl, propyl, isopropyl, n-butyl, sec-butyl, isobutyl, tert.-butyl, n-pentyl, or 2,2-dimethylpropyloxy,

~~(2) -OH,~~

~~(3)~~(2) methoxy, ethyloxy, isopropoxy, n-butoxy, sec-butoxy, isobutoxy, tert.-butoxy, n-pentyloxy, or 2,2-dimethylpropyloxy, unsubstituted or substituted with one to three halo, hydroxy, or methoxy substituents,

~~(4)~~(3) cyclopropyloxy, cyclobutyloxy, cyclopentyloxy, cyclohexyloxy, or cycloheptyloxy,

~~(5)~~(4) cyclopropylmethoxy, cyclobutylmethoxy, cyclopentylmethoxy, cyclohexylmethoxy, or cycloheptylmethoxy,

~~(6)~~(5) 4-fluorophenyloxy, 4-chlorophenyloxy, 4-methoxyphenyloxy, 3-fluorophenyloxy, 3-chlorophenyloxy, 3,4-difluorophenyloxy, 3,4-dichlorophenyloxy, 3,5-difluorophenyloxy, 3,5-dichlorophenyloxy or phenyloxy,

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~~(7)~~(6) 4-pyridyloxy, 3-pyridyloxy, 2-pyridyloxy, 6-chloro-3-pyridyloxy, or 5-chloro-3-pyridyloxy,

~~(8)~~(7) benzyloxy, 3-fluorobenzyloxy, 3-chlorobenzyloxy, 4-fluorobenzyloxy, 4-chlorobenzyloxy, 3,4-difluorobenzyloxy, 3,4-dichlorobenzyloxy, 3,5-difluorobenzyloxy, 3,5-dichlorobenzyloxy, 2,4-fluorobenzyloxy, 2,4-dichlorobenzyloxy, alpha-methyl-4-fluorobenzyloxy, alpha-methyl-4-chlorobenzyloxy, alpha,alpha-dimethyl-4-fluorobenzyloxy, or alpha,alpha-dimethyl-4-chlorobenzyloxy,

~~(9)~~(8) 2-pyridylmethoxy, 3-pyridylmethoxy, or 4-pyridylmethoxy,

~~(10)~~(9) N-methylamino, N,N-dimethylamino, N,N-diisopropylamino, or -N(CH₃)CH₂CH₂N(CH₃)₂, or N-containing heterocycloalkyl bonded via nitrogen selected from: morpholinyl, thiomorpholinyl, pyrrolidinyl, piperidinyl, and [2.2.1]azabicycloheptyl,

~~(11)~~(10) -NHCOR^a wherein R^a is selected from:

- (a) hydrogen,
- (b) C₁₋₄alkyl,
- (c) C₄₋₆cycloalkyl, and
- (d) phenyl, 4-fluorophenyl, 4-chlorophenyl, 3,4-difluorophenyl, or 3,4-

dichlorophenyl,

~~(12)~~(11) -CO₂H,

~~(13)~~(12) -C(O)NH₂,

~~(14)~~(13) -CN, and

~~(15)~~(14) -SO₂CH₃;

R² is selected from:

- (1) hydrogen,
- (2) methyl, ethyl, propyl, isopropyl, n-butyl, sec-butyl, isobutyl, tert.-butyl, n-pentyl, or 2,2-dimethylpropyloxy,
- (3) -OH,
- (4) methoxy, ethyloxy, isopropyloxy, n-butyloxy, sec-butyloxy, isobutyloxy, tert.-butyloxy, n-pentyloxy, or 2,2-dimethylpropyloxy, unsubstituted or substituted with one to three halo, hydroxy, or methoxy substituents,
- (5) cyclopropyloxy, cyclobutyloxy, cyclopentyloxy, cyclohexyloxy, or cycloheptyloxy,
- (6) cyclopropylmethoxy, cyclobutylmethoxy, cyclopentylmethoxy, cyclohexylmethoxy, or cycloheptylmethoxy,
- (7) 4-fluorophenyloxy, 4-chlorophenyloxy, 3-fluorophenyloxy, 3-chlorophenyloxy, 3-cyanophenyloxy, 3,4-difluorophenyloxy, 3,4-dichlorophenyloxy, 3,5-difluorophenyloxy, 3,5-dichlorophenyloxy, or phenyloxy,

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- (8) benzyloxy, 3-fluorobenzyloxy, 3-chlorobenzyloxy, 4-fluorobenzyloxy, 4-chlorobenzyloxy, 3,4-difluorobenzyloxy, 3,4-dichlorobenzyloxy, 3,5-difluorobenzyloxy, 3,5-dichlorobenzyloxy, 2,4-fluorobenzyloxy, or 2,4-dichlorobenzyloxy,
- (9) 4-pyridyloxy, 3-pyridyloxy, 2-pyridyloxy, 6-chloro-3-pyridyloxy, or 5-chloro-3-pyridyloxy,
- (10) amino, N-methylamino, N-ethylamino, N,N-dimethylamino, N,N-diethylamino, N,N-diisopropylamino, or N-containing heterocycloalkyl bonded via nitrogen selected from: pyrrolidinyl, and piperidinyl,
- (11) -NHCOR^a wherein R^a is selected from:
 - (a) hydrogen, and
 - (b) C_{1-4} alkyl,
- (12) -CN , and
- (13) $\text{-SO}_2\text{CH}_3$;

R^3 and R^4 are each independently selected from:

- (1) 4-chlorophenyl,
- (2) 4-methoxyphenyl,
- (3) 4-fluorophenyl,
- (4) 4-trifluoromethylphenyl,
- (5) 3-chlorophenyl,
- (6) 3-methoxyphenyl,
- (7) 2,4-dichlorophenyl, and
- (8) 2-chloro-4-methylthiophenyl;

or a pharmaceutically acceptable salts thereof.

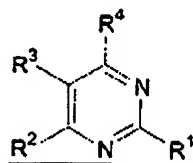
Claim 9. (previously presented) The compound according to Claim 8, wherein: R^3 is 4-chlorophenyl and R^4 is 2,4-dichlorophenyl, or a pharmaceutically acceptable salt thereof.

Claim 10 (canceled)

Claim 11. (currently amended) A method of treating a disease mediated by the Cannabinoid-1 receptor selected from: ~~psychosis, memory deficit, cognitive disorders, migraine, neuropathy, neuro-inflammatory disorders, cerebral vascular accidents, head trauma, anxiety disorders, stress, epilepsy, Parkinson's disease, schizophrenia, substance abuse disorders, constipation, chronic intestinal pseudo-obstruction, cirrhosis of the liver, asthma, obesity, and other eating disorders~~ associated with excessive food intake, comprising administration to a patient in need of such

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treatment of a therapeutically effective amount of a compound according to ~~Claim 1~~ compound of structural formula I:



(I)

or a pharmaceutically acceptable salt thereof, wherein:

R¹ is selected from:

- (1) C₁₋₁₀alkyl,
- (2) -OR^a,
- (3) -NR^aR^b,
- (4) -NR^bC(O)R^a,
- (5) -CO₂R^a,
- (6) -C(O)NR^aR^b,
- (7) cyano, and
- (8) -SO₂R^b,

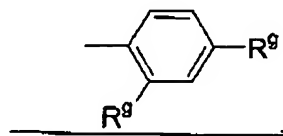
provided that R¹ is not -NH₂:

R² is selected from:

- (1) hydrogen,
- (2) C₁₋₁₀alkyl,
- (3) -OR^a,
- (4) -NR^aR^b,
- (5) -NR^aC(O)R^b,
- (6) -CO₂R^a,
- (7) -C(O)NR^aR^b,
- (8) cyano,
- (9) -SR^a, and
- (10) -SO₂R^a,

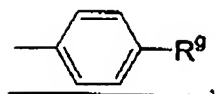
wherein R³ and R⁴ are each independently selected from:

(I)

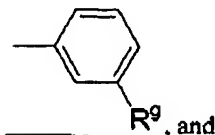


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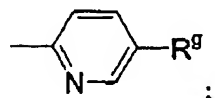
(2)



(3)



(4)



each R^a is independently selected from:

- (1) hydrogen,
- (2) C_{1-10} alkyl,
- (3) C_{2-10} alkenyl,
- (4) cycloalkyl,
- (5) cycloalkyl- C_{1-10} alkyl;
- (6) cycloheteroalkyl,
- (7) cycloheteroalkyl- C_{1-10} alkyl;
- (8) aryl,
- (9) heteroaryl,
- (10) aryl- C_{1-10} alkyl, and
- (11) heteroaryl- C_{1-10} alkyl; and

each R^b is independently selected from:

- (1) hydrogen,
- (2) C_{1-10} alkyl,
- (3) C_{2-10} alkenyl,
- (4) cycloalkyl,
- (5) cycloalkyl- C_{1-10} alkyl;
- (6) cycloheteroalkyl,
- (7) cycloheteroalkyl- C_{1-10} alkyl;
- (8) aryl,
- (9) heteroaryl,
- (10) aryl- C_{1-10} alkyl, and
- (11) heteroaryl- C_{1-10} alkyl, or

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R^a and R^b together with the nitrogen atom to which they are attached form a bridged or unbridged heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-R^d.

each R^a and R^b may be unsubstituted or substituted with one to three substituents selected from R^c:

each R^c is independently selected from:

- (1) C₁₋₁₀alkyl.
- (2) -OR^d.
- (3) -NR^eS(O)_mR^d.
- (4) halogen.
- (5) -SR^d.
- (6) -S(O)_mNR^dR^e.
- (7) -NR^dR^e.
- (8) -C(O)R^d.
- (9) -CO₂R^d.
- (10) -CN.
- (11) -C(O)NR^dR^e.
- (12) -NR^eC(O)R^d.
- (13) -NR^eC(O)OR^d.
- (14) -NR^eC(O)NR^dR^e.
- (15) -CF₃.
- (16) -OCF₃.
- (17) cycloheteroalkyl.
- (18) aryl.
- (19) arylC₁₋₄alkyl.
- (20) heteroaryl, and
- (21) heteroarylC₁₋₄alkyl.

R^d and R^e are independently selected from:

- (1) hydrogen.
- (2) C₁₋₁₀alkyl.
- (3) C₂₋₁₀alkenyl.
- (4) cycloalkyl.
- (5) cycloalkyl-C₁₋₁₀alkyl.
- (6) cycloheteroalkyl.
- (7) cycloheteroalkyl-C₁₋₁₀alkyl.
- (8) aryl.
- (9) heteroaryl.

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(10) aryl-C₁₋₁₀alkyl, and

(11) heteroaryl-C₁₋₁₀alkyl, or

R^d and R^e together with the nitrogen atom to which they are attached form a bridged or unbridged heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-R^f.

each R^d and R^e may be unsubstituted or substituted with one to three substituents selected from R^f. R^f is independently selected from:

- (1) halogen,
- (2) C₁₋₁₀alkyl,
- (3) -O-C₁₋₄alkyl,
- (4) -S-C₁₋₄alkyl,
- (5) -CN,
- (6) -CF₃, and
- (7) -OCF₃;

each R^g is independently selected from:

- (1) halogen,
- (2) C₁₋₁₀alkyl,
- (3) -O-C₁₋₄alkyl,
- (4) -S-C₁₋₄alkyl,
- (5) -CN,
- (6) -CF₃, and
- (7) -OCF₃; and

m is selected from 1 and 2.

Claim 12. (canceled)

Claim 13. (previously presented) The method according to Claim 11 wherein the disease mediated by the Cannabinoid-1 receptor is an eating disorder associated with excessive food intake.

Claim 14. (currently amended) The method according to Claim 13 wherein the eating disorder associated associated with excessive food intake is selected from obesity, bulimia nervosa, and compulsive eating disorders.

Claim 15. (original) The method according to Claim 14 wherein the eating disorder associated with excessive food intake is obesity.

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Claim 16. (cancelled)

Claim 17. (original) A composition comprising a compound according to Claim 1 and a pharmaceutically acceptable carrier.

Claims 18-24 (cancelled)

Claim 25. (currently amended) The method according to Claim 11 for treating substance abuse disorders, wherein the abused substance is nicotine in a person dependent on nicotine; ~~comprising administering a therapeutically effective amount of a compound according to Claim 1 to the person.~~

Claim 26. (new) The compound according to Claim 1, selected from:

- (1) 2-(4-fluorobenzyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (2) 2-(4-fluorobenzyloxy)-4-(2-chloro-4-methylthiophenyl)-5-(4-chlorophenyl)-pyrimidine;
- (3) 2-(3,4-difluorobenzyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (4) 2-(3,4-difluorobenzyloxy)-4-(2-chloro-4-methylthio-phenyl)-5-(4-chlorophenyl)-pyrimidine;
- (5) 2-(4-chlorobenzyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (6) 2-(4-chlorobenzyloxy)-4-(2-chloro-4-methylthio-phenyl)-5-(4-chlorophenyl)-pyrimidine;
- (7) 2-(3,4-dichlorobenzyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (8) 2-(3,4-dichlorobenzyloxy)-4-(2-chloro-4-methylthio-phenyl)-5-(4-chlorophenyl)-pyrimidine;
- (9) 2-(3-fluorobenzyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (10) 2-(3-fluorobenzyloxy)-4-(2-chloro-4-methylthio-phenyl)-5-(4-chlorophenyl)-pyrimidine;
- (11) 2-(3-chlorobenzylamino)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)-pyrimidine;
- (12) 2-(*N,N*-dimethylamino)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (13) 2-carboxy-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (14) 2-methoxy-4-hydroxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (15) 2-(3,4-difluorobenzyloxy)-4-hydroxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (16) 2-(3,4-difluorobenzyloxy)-4-hydroxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (17) 2,4-bis-(3,4-difluorobenzyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (18) 2,4-dimethoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (19) 2,4-diethoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (20) 2,4-diisopropoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (21) 2-methylsulfonyl-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;

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- (22) 2,4-bis(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (23) 2-cyano-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (24) 2-(3,4-difluorobenzyloxy)-4-cyano-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (25) 2-cyano-4-(3,4-difluorobenzyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (26) 2,4-bis(cyano)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (27) 2-(3,4-difluorophenoxy)-4-methyl-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (28) 2-ethyl-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (29) 2-isopropyl-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (30) 2-(3,4-difluorobenzyloxy)-4-methyl-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (31) 2-(3,4-difluorobenzyloxy)-4-ethyl-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (32) 2-(3,4-difluorobenzyloxy)-4-(*N*-methylamino)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (33) 2-(3,4-difluorophenoxy)-4-amino-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (34) 2-(3,4-difluorobenzyloxy)-4-(amino)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (35) 2-(3,4-difluorophenoxy)-4-(acetylamino)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (36) 2-(3,4-difluorobenzyloxy)-4-(acetylamino)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (37) 2-(3,4-difluorophenoxy)-4-(*N*-pyrrolidinyl)-5-[4-chlorophenyl]-6-[2,4-dichlorophenyl]pyrimidine;
- (38) 2-(cyclopropylmethoxy)-4-(*N*-pyrrolidinyl)-5-[4-chlorophenyl]-6-[2,4-dichlorophenyl]pyrimidine;
- (39) 2-(*N,N*-diethylamino)-4-(3,4-difluorobenzyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (40) 2-(*N,N*-diisopropylamino)-4-(3,4-difluorobenzyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (41) 2-(*N*-pyrrolidinyl)-4-(3,4-difluorobenzyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (42) 2-(*N*-piperidyl)-4-(3,4-difluorobenzyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (43) 2-(*N*-morpholinyl)-4-(3,4-difluorobenzyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (44) 2-(7-*N*-[2.2.1]-azabicycloheptyl)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (45) 2-(*n*-propionyl)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;

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- (46) 2-(*N*-(2-methyl)propionyl)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (47) 2-(*N*-(3-methyl)butyryl)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (48) 2-(aminocarbonyl)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (49) 2-(carboxy)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (50) 2-(2-hydroxyethyleneoxy)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (51) 2-(2-methoxyethyleneoxy)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (52) 2-(cyclohexylmethyloxy)-4-isopropoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (53) 2-cyclohexyloxy-4-isopropoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (54) 2-(3,4-difluorophenoxy)-4-cyclohexyloxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (55) 2-(3,4-difluorobenzoyloxy)-4-cyclohexyloxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (56) 2,4-bis(cyclopropylmethyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (57) 2-cyclopropyloxy-4-(3-pyridyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (58) 2-(*N*-pyrrolidinyl)-4-cyclopropyloxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (59) 2,4-bis(isopropoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (60) 2-(3,4-difluorobenzoyloxy)-4-(4-chlorophenyl)-5-(2,4-dichlorophenyl)pyrimidine;
- (61) 2-(4-chlorobenzoyloxy)-4-(4-chlorophenyl)-5-(2,4-dichlorophenyl)pyrimidine;
- (62) 2-(3-fluorobenzoyloxy)-4-(4-chlorophenyl)-5-(2,4-dichlorophenyl)pyrimidine;
- (63) 2-(3-chlorobenzoyloxy)-4-(4-chlorophenyl)-5-(2,4-dichlorophenyl)pyrimidine;
- (64) 2-(4-fluorobenzoyloxy)-4-(4-chlorophenyl)-5-(2,4-dichlorophenyl)pyrimidine;
- (65) 2-(α -methyl-4-fluorobenzoyloxy)-4-(4-chlorophenyl)-5-(2,4-dichlorophenyl)pyrimidine;
- (66) 2-(α -methyl-4-fluorobenzoyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (67) 2-(3-pyridylmethoxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (68) 2-(*n*-butyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (69) 2-(2,4-dichlorobenzoyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (70) 2-(cyclohexylmethoxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (71) 2-(3,5-dichlorobenzoyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (72) 2-(6-chloro-3-pyridylmethoxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (73) 2-(α,α -dimethyl-4-fluorobenzoyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (74) 2-(4-fluorophenyloxy)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;

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- (75) 2-(3-fluorophenyl)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (76) 2-(3,4-difluorophenyl)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (77) 2-(3-chlorophenyl)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (78) 2-(4-methoxyphenyl)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (79) 2-(3-pyridyl)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (80) 2-(5-chloro-3-pyridyl)-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (81) 2-(*N*-(4-fluorobenzamido))-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (82) 2-(*N*-(cyclohexylcarboxamido))-4-(2,4-dichlorophenyl)-5-(4-chlorophenyl)pyrimidine;
- (83) 2,4-bis(cyclobutylmethoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (84) 2-cyclobutylmethoxy-4-(6-fluoro-3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (85) 2-cyclobutylmethoxy-4-(5-chloro-3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (86) 2-methylsulfonyl-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (87) 2-cyclobutylmethoxy-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (88) 2-(2,2-dimethylpropyl)-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (89) 2-(2-*t*-butyl)-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (90) 2-(2-cyclobutyl)-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (91) 2-(*n*-propyl)-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (92) 2-(*n*-butyl)-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (93) 2-(*sec*-butyl)-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (94) 2-(*iso*-butyl)-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (95) 2-(*isopropyl*)-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (96) 2-(*n*-pentyl)-4-(3-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (97) 2-cyclopropyl-4-(4-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (98) 2,4-bis-(4-pyridyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (99) 2-(*isobutyl*)-4-(3,4-difluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (100) 2-(cyclopropylmethoxy)-4-(3,4-difluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (101) 2-(*isopropyl*)-4-(3,4-difluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (102) 2-ethoxy-4-(3,4-difluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (103) 2-(*N*-pyrrolidinyl)-4-(3,4-difluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;

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- (104) 2-(*N,N,N'*-trimethyl-ethylenediamino)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (105) 2-(*N*-piperidinyl)-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (106) 2-(*N*-morpholinyl)-ethylenediamino-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (107) 2-dimethylamino-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (108) 2-(*N*-pyrrolidinyl)-4-(3-pyridyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (109) 2-methylsulfonyl-4-(2-pyridyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (110) 2-(2-isopropoxy)-4-(2-pyridyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (111) 2-(2-*N,N,N'*-trimethyl-ethylenediamino)-4-(2-pyridyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (112) 2-(2-pyrrolidinyl)-4-(2-pyridyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (113) 2-(methylsulfonyl)-4-methoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (114) 2-methoxy-4-(methylsulfonyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (115) 2-(3,4-difluorophenyl)-4-methoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (116) 2-methoxy-4-(3,4-difluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (117) 2-(3-fluorophenyl)-4-methoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (118) 2-methoxy-4-(3-fluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (119) 2-methoxy-4-(2-pyridyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (120) 2-(2-pyridyloxy)-4-methoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (121) 2-(5-chloro-3-pyridyloxy)-4-methoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (122) 2-methoxy-4-(5-chloro-3-pyridyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (123) 2-(3-pyridyloxy)-4-methoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (124) 2-methoxy-4-(3-pyridyloxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (125) 2-methoxy-4-(4-fluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (126) 2-methoxy-4-(3,5-difluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (127) 2-methoxy-4-(3-cyanophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (128) 2-(3,4-difluorobenzyl)-4-methoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (129) 2-methoxy-4-(3,4-difluorobenzyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (130) 2-(methylsulfonyl)-4-ethoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (131) 2-ethoxy-4-(methylsulfonyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (132) 2-(3,4-difluorobenzyl)-4-ethoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (133) 2-ethoxy-4-(3,4-difluorophenyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
- (134) 2-(methylsulfonyl)-4-isopropoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;

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- (135) 2-isopropoxy-4-(methylsulfonyl)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
(136) 2-(3,4-difluorobenzyloxy)-4-isopropoxy-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
(137) 2-isopropoxy-4-(3,4-difluorophenoxy)-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
(138) 2-(3,4-difluorobenzyloxy)-4-pyrrolidinyl-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
(139) 2-(3,4-difluorobenzyloxy)-4-dicethylamino-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
(140) 2-(3,4-difluorobenzyloxy)-4-dimethylamino-5-(4-chlorophenyl)-6-(2,4-dichlorophenyl)pyrimidine;
(141) 2-(3,4-difluorophenoxy)-4-methoxy-5-(4-fluorophenyl)-6-[2, 4-dichlorophenyl]pyrimidine;
(142) 2-(3,4-difluorophenoxy)-4-methoxy-5-(4-methoxyphenyl)-6-[2, 4-dichlorophenyl]pyrimidine;
(143) 2-(3,4-difluorophenoxy)-4-methoxy-5-(4-trifluoromethylphenyl)-6-[2, 4-dichlorophenyl]pyrimidine;
(144) 2-(3,4-difluorophenoxy)-4-methoxy-5-(3-chlorophenyl)-6-[2, 4-dichlorophenyl]pyrimidine; and
(145) 2-(3,4-difluorophenoxy)-4-methoxy-5-(3-methoxyphenyl)-6-[2, 4-dichlorophenyl]pyrimidine, or a pharmaceutically acceptable salt thereof.

Claim 27. (new) The method according to Claim 11, wherein in the compound of structural formula I,

R¹ is selected from:

- (1) C₁₋₆alkyl,
- (2) -OH,
- (3) -OC₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- (4) cycloalkyloxy-, unsubstituted or substituted with one to three R^C substituents,
- (5) cycloalkyl-C₁₋₄alkyloxy-, unsubstituted or substituted with one to three R^C substituents,
- (6) cycloheteroalkyloxy-, unsubstituted or substituted with one to three R^C substituents,
- (7) cycloheteroalkyl-C₁₋₄alkyloxy-, unsubstituted or substituted with one to three R^C substituents,
- (8) phenoxy, unsubstituted or substituted with one to three R^C substituents,
- (9) heteroaryloxy, unsubstituted or substituted with one to three R^C substituents,
- (10) phenyl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^C substituents,
- (11) heteroaryl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^C substituents,

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- (12) $-NR^aR^b$,
 - (13) $-NR^bC(O)R^a$,
 - (14) $-CO_2H$,
 - (15) C_{1-6} alkyloxycarbonyl-, unsubstituted or substituted with one to three R^c substituents,
 - (16) cycloalkyloxycarbonyl-, unsubstituted or substituted with one to three R^c substituents,
 - (17) cycloalkyl- C_{1-4} alkyloxycarbonyl-, unsubstituted or substituted with one to three R^c substituents,
 - (18) phenyloxycarbonyl, unsubstituted or substituted with one to three R^c substituents,
 - (19) heteroaryloxycarbonyl, unsubstituted or substituted with one to three R^c substituents,
 - (20) phenyl- C_{1-4} alkyloxycarbonyl, unsubstituted or substituted with one to three R^c substituents,
 - (21) heteroaryl- C_{1-4} alkyloxycarbonyl, unsubstituted or substituted with one to three R^c substituents,
 - (22) $-C(O)NR^aR^b$,
 - (23) cyano,
 - (24) $-SO_2C_{1-6}$ alkyl, unsubstituted or substituted with one to three R^c substituents; and
- provided that R^1 is not $-NH_2$;
 or a pharmaceutically acceptable salt thereof.

Claim 28. (new) The method according to Claim 27, wherein, in the compound of structural formula I:

R^a and R^b are each selected from:

- (1) hydrogen,
- (2) C_{1-6} alkyl, unsubstituted or substituted with one to three R^c substituents,
- (3) cycloalkyl, unsubstituted or substituted with one to three R^c substituents,
- (4) cycloalkyl- C_{1-4} alkyl, unsubstituted or substituted with one to three R^c substituents,
- (5) phenyl, unsubstituted or substituted with one to three R^c substituents,
- (6) heteroaryl, unsubstituted or substituted with one to three R^c substituents,
- (7) phenyl- C_{1-4} alkyl, unsubstituted or substituted with one to three R^c substituents, or
- (8) heteroaryl- C_{1-4} alkyl, unsubstituted or substituted with one to three R^c substituents, or

when bonded to nitrogen, R^a and R^b together with the nitrogen atom to which they are attached form a bridged or unbridged heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N- R^d , unsubstituted or substituted on carbon with one to three R^c substituents;

or a pharmaceutically acceptable salts thereof.

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Claim 29. (new) The method according to Claim 28, wherein, in the compound according to Claim 1,

R¹ is selected from:

- (1) C₁₋₆alkyl,
- (2) -OC₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- (3) C₄₋₇cycloalkyloxy-, unsubstituted or substituted with one to two R^C substituents,
- (4) cycloalkyl-C₁₋₃alkyloxy-, unsubstituted or substituted with one to two R^C substituents,
- (5) phenoxy, unsubstituted or substituted with one to two R^C substituents,
- (6) pyridyloxy, unsubstituted or substituted with one to two R^C substituents,
- (7) phenyl-C₁₋₃alkyloxy, unsubstituted or substituted with one to two R^C substituents,
- (8) pyridyl-C₁₋₃alkyloxy, unsubstituted or substituted with one to two R^C substituents,
- (9) -NR^aR^b, wherein:

R^a is selected from:

- (a) C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- (b) cycloalkyl, unsubstituted or substituted with one to two R^C substituents,
- (c) cycloalkyl-C₁₋₄alkyl, unsubstituted or substituted with one to two R^C substituents,
- (d) phenyl, unsubstituted or substituted with one to two R^C substituents,
- (e) heteroaryl, unsubstituted or substituted with one to two R^C substituents,
- (f) benzyl, unsubstituted or substituted with one to two R^C substituents,

R^b is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents, or

R^a and R^b together with the nitrogen atom to which they are attached form a bridged or unbridged heterocyclic ring of 4 to 7 members containing 0-2 additional heteroatoms independently selected from oxygen, sulfur and N-R^d, unsubstituted or substituted on carbon with one to two R^C substituents,

(10) -NR^bC(O)R^a, wherein:

R^a is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- (c) cycloalkyl, unsubstituted or substituted with one to two R^C substituents,
- (d) cycloalkyl-C₁₋₄alkyl, unsubstituted or substituted with one to two R^C substituents,
- (e) phenyl, unsubstituted or substituted with one to two R^C substituents,

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- (f) pyridyl, unsubstituted or substituted with one to three R^c substituents,
- (g) benzyl, unsubstituted or substituted with one to two R^c substituents,
- (h) pyridylmethyl-, unsubstituted or substituted with one to three R^c substituents,

R^b is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents,

(11) -CO₂H,

(12) C₁₋₆alkyloxycarbonyl-, unsubstituted or substituted with one to three R^c substituents,

(13) -C(O)NR^aR^b, wherein:

R^a is selected from:

- (a) hydrogen,
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents,

R^b is selected from:

- (a) hydrogen, and
- (b) C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents,

(14) cyano

(15) -SC₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents, and

(16) -SO₂C₁₋₆alkyl, unsubstituted or substituted with one to three R^c substituents;

each R^c is independently selected from:

- (1) C₁₋₃alkyl,
- (2) hydroxy,
- (3) -OC₁₋₃alkyl,
- (4) halogen,
- (5) -SCH₃,
- (6) -SH,
- (7) -NR^dRe,
- (8) -C(O)C₁₋₃alkyl,
- (9) -CO₂C₁₋₃alkyl,
- (10) -CO₂H,
- (11) -CN,
- (12) -CF₃,
- (13) -OCF₃,
- (14) cycloheteroalkyl,
- (15) phenyl,
- (16) benzyl, and
- (17) pyridyl;

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or a pharmaceutically acceptable salts thereof.

Claim 30. (new) The method according to Claim 28, wherein, in the compound according to Claim 1, R² is selected from:

- (1) hydrogen,
 - (2) C₁₋₆alkyl,
 - (3) -OH,
 - (4) -OC₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
 - (5) cycloalkyloxy-, unsubstituted or substituted with one to three R^C substituents,
 - (6) cycloalkyl-C₁₋₄alkyloxy-, unsubstituted or substituted with one to three R^C substituents,
 - (7) cycloheteroalkyloxy-, unsubstituted or substituted with one to three R^C substituents,
 - (8) cycloheteroalkyl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^C substituents,
 - (9) phenyloxy, unsubstituted or substituted with one to three R^C substituents,
 - (10) heteroaryloxy, unsubstituted or substituted with one to three R^C substituents,
 - (11) phenyl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^C substituents,
 - (12) heteroaryl-C₁₋₄alkyloxy, unsubstituted or substituted with one to three R^C substituents,
 - (13) -NR^aR^b,
 - (14) -NR^bC(O)R^a,
 - (15) -CO₂H,
 - (16) C₁₋₆alkyloxycarbonyl-, unsubstituted or substituted with one to three R^C substituents,
 - (17) cycloalkyloxycarbonyl-, unsubstituted or substituted with one to three R^C substituents,
 - (18) cycloalkyl-C₁₋₄alkyloxycarbonyl-, unsubstituted or substituted with one to three R^C substituents,
 - (19) phenyloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
 - (20) heteroaryloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
 - (21) phenyl-C₁₋₄alkyloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
 - (22) heteroaryl-C₁₋₄alkyloxycarbonyl, unsubstituted or substituted with one to three R^C substituents,
 - (23) -C(O)NR^aR^b,
 - (24) cyano,
 - (25) -SC₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents, and
 - (26) -SO₂C₁₋₆alkyl, unsubstituted or substituted with one to three R^C substituents,
- or a pharmaceutically acceptable salts thereof.

Claim 31. (new) The method according to Claim 27, wherein, in the compound of formula I: R¹ is selected from:

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- (1) methyl, ethyl, propyl, isopropyl, n-butyl, sec-butyl, isobutyl, tert.-butyl, n-pentyl, or 2,2-dimethylpropyloxy,
- (2) methoxy, ethyloxy, isopropyloxy, n-butyloxy, sec-butyloxy, isobutyloxy, tert.-butyloxy, n-pentyloxy, or 2,2-dimethylpropyloxy, unsubstituted or substituted with one to three halo, hydroxy, or methoxy substituents,
- (3) cyclopropyloxy, cyclobutyloxy, cyclopentyloxy, cyclohexyloxy, or cycloheptyloxy,
- (4) cyclopropylmethoxy, cyclobutylmethoxy, cyclopentylmethoxy, cyclohexylmethoxy, or cycloheptylmethoxy,
- (5) 4-fluorophenyloxy, 4-chlorophenyloxy, 4-methoxyphenyloxy, 3-fluorophenyloxy, 3-chlorophenyloxy, 3,4-difluorophenyloxy, 3,4-dichlorophenyloxy, 3,5-difluorophenyloxy, 3,5-dichlorophenyloxy or phenyloxy,
- (6) 4-pyridyloxy, 3-pyridyloxy, 2-pyridyloxy, 6-chloro-3-pyridyloxy, or 5-chloro-3-pyridyloxy,
- (7) benzyloxy, 3-fluorobenzyloxy, 3-chlorobenzyloxy, 4-fluorobenzyloxy, 4-chlorobenzyloxy, 3,4-difluorobenzyloxy, 3,4-dichlorobenzyloxy, 3,5-difluorobenzyloxy, 3,5-dichlorobenzyloxy, 2,4-fluorobenzyloxy, 2,4-dichlorobenzyloxy, alpha-methyl-4-fluorobenzyloxy, alpha-methyl-4-chlorobenzyloxy, alpha,alpha-dimethyl-4-fluorobenzyloxy, or alpha,alpha-dimethyl-4-chlorobenzyloxy,
- (8) 2-pyridylmethyloxy, 3-pyridylmethyloxy, or 4-pyridylmethyloxy,
- (9) N-methylamino, N,N-dimethylamino, N,N-diisopropylamino, or -N(CH₃)CH₂CH₂N(CH₃)₂, or N-containing heterocycloalkyl bonded via nitrogen selected from: morpholinyl, thiomorpholinyl, pyrrolidinyl, piperidinyl, and [2.2.1]azabicycloheptyl,
- (10) -NHCOR^a wherein R^a is selected from:
 - (a) hydrogen,
 - (b) C₁₋₄alkyl,
 - (c) C₄₋₆cycloalkyl, and
 - (d) phenyl, 4-fluorophenyl, 4-chlorophenyl, 3,4-difluorophenyl, or 3,4-dichlorophenyl,
- (11) -CO₂H,
- (12) -C(O)NH₂,
- (13) -CN, and
- (14) -SO₂CH₃;

R² is selected from:

- (1) hydrogen,
- (2) methyl, ethyl, propyl, isopropyl, n-butyl, sec-butyl, isobutyl, tert.-butyl, n-pentyl, or 2,2-dimethylpropyloxy,

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- (3) -OH,
- (4) methoxy, ethyloxy, isopropoxy, n-butoxy, sec-butoxy, isobutoxy, tert.-butoxy, n-pentyloxy, or 2,2-dimethylpropyloxy, unsubstituted or substituted with one to three halo, hydroxy, or methoxy substituents,
- (5) cyclopropyloxy, cyclobutyloxy, cyclopentyloxy, cyclohexyloxy, or cycloheptyloxy,
- (6) cyclopropylmethoxy, cyclobutylmethoxy, cyclopentylmethoxy, cyclohexylmethoxy, or cycloheptylmethoxy,
- (7) 4-fluorophenyloxy, 4-chlorophenyloxy, 3-fluorophenyloxy, 3-chlorophenyloxy, 3-cyanophenyloxy, 3,4-difluorophenyloxy, 3,4-dichlorophenyloxy, 3,5-difluorophenyloxy, 3,5-dichlorophenyloxy, or phenyloxy,
- (8) benzyloxy, 3-fluorobenzyloxy, 3-chlorobenzyloxy, 4-fluorobenzyloxy, 4-chlorobenzyloxy, 3,4-difluorobenzyloxy, 3,4-dichlorobenzyloxy, 3,5-difluorobenzyloxy, 3,5-dichlorobenzyloxy, 2,4-fluorobenzyloxy, or 2,4-dichlorobenzyloxy,
- (9) 4-pyridyloxy, 3-pyridyloxy, 2-pyridyloxy, 6-chloro-3-pyridyloxy, or 5-chloro-3-pyridyloxy,
- (10) amino, N-methylamino, N-ethylamino, N,N-dimethylamino, N,N-diethylamino, N,N-diisopropylamino, or N-containing heterocycloalkyl bonded via nitrogen selected from: pyrrolidinyl, and piperidinyl,
- (11) -NHCOR^a wherein R^a is selected from:
 - (a) hydrogen, and
 - (b) C₁₋₄alkyl,
- (12) -CN, and
- (13) -SO₂CH₃;

R³ and R⁴ are each independently selected from:

- (1) 4-chlorophenyl,
- (2) 4-methoxyphenyl,
- (3) 4-fluorophenyl,
- (4) 4-trifluoromethylphenyl,
- (5) 3-chlorophenyl,
- (6) 3-methoxyphenyl,
- (7) 2,4-dichlorophenyl, and
- (8) 2-chloro-4-methylthiophenyl;

or a pharmaceutically acceptable salts thereof.

Claim 32. (new) The method according to Claim 31, wherein, in the compound of formula I: R³ is 4-chlorophenyl and R⁴ is 2,4-dichlorophenyl, or a pharmaceutically acceptable salt thereof.